SEQIT: Visualizing Sequences of Interest in Eye-Tracking Data

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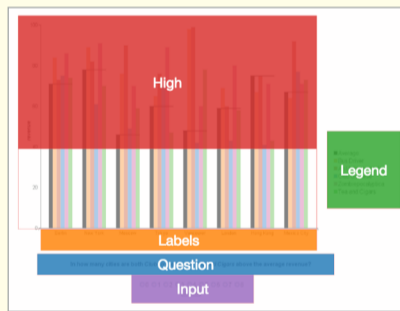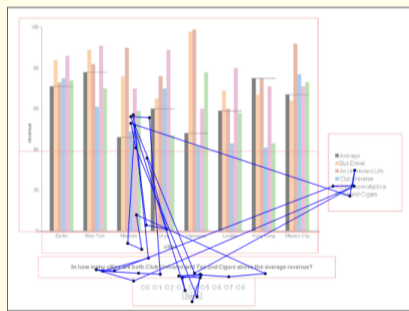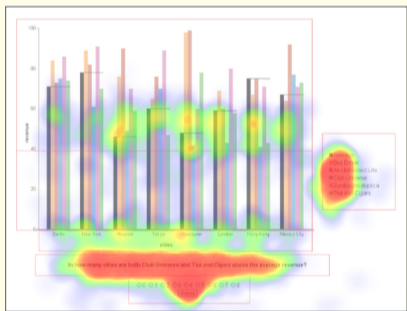|	
Task	Inspect eye-tracking data and explore to discover sequences of interest.
Data	Fixations of multiple users performing 30-second tasks; user characteristic measures.
Solution	Multiform views with linked coloring and highlighting; data aggregation.

Review Panel — visual stimulus in the background, additional data as overlay.

Heat map
overview of gaze distribution

Fixations and saccades
individual data points

Areas of Interest
spatial and semantic context
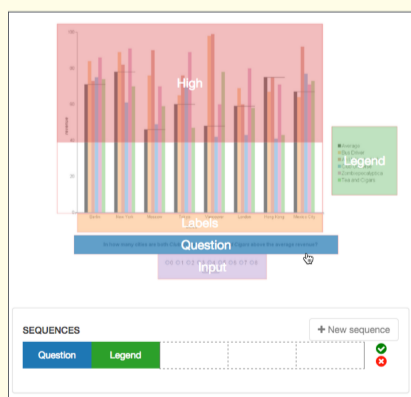
User Characteristics Panel

Multiple user characteristic measures are shown in bar charts that allow **sorting** for finding correlations in the data.

In this example:

- ⚙ *perceptual speed*
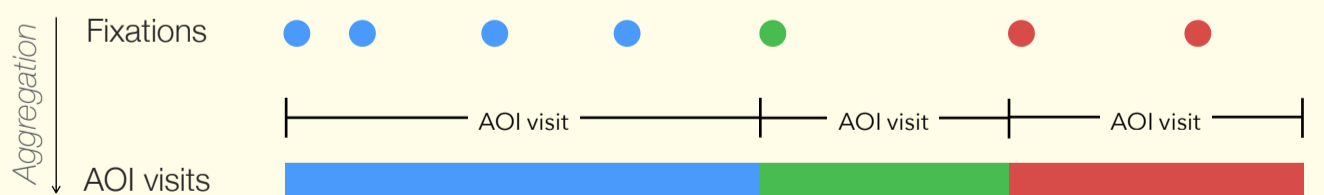- ⬛ *verbal working memory*
- 👁 *visual working memory*

Sequence Tool Panel

This tool helps create and explore sequence patterns.

Build a sequence and visualize in the timeline.

Timeline Panel — overview of AOI visits, color-coded by AOI.

Aggregation

Fixations

AOI visit — AOI visit — AOI visit

AOI visits

Details on demand by hovering:

Absolute time scale reveals trial length.